Claims

- 1. 17 (cancelled)
- 18. A method for estimating the impact of a promotion on product performance for a product in the market, the method comprising:
- (a) identifying at least one market event whose occurrence will impact product performance;
- (b) collecting market data including promotion and product performance data and generating descriptive statistics for each data variable;
- (c) selecting a model for the relationship between the at least one promotion and product performance, wherein selecting the model comprises:
- (d) applying a cross-correlation function to the market data to systematically detect a promotion lag structure in.
- (e) examining the temporal pattern of market data against time and accordingly selecting a functional form for the promotion lag structure which fits the occurrence of the at least one market event;
- (f) applying a cross-correlation function to the market data and promotion lag structure, and other market variables to systematically detect data lag structures for the other market variables;

(g) computing model parameters by fitting the model to market variables and promotion variables, lag structures, market events and market inputs; and

- (e) calculating product performance attributable to the promotion according to the flitted model; and providing said product performance attributable to the promotion to said user as an estimate of promotion impact.
- 19. The method of claim 18, wherein fitting the model comprises evaluating a model residual to detect any auto-correlation in the model residual, and accordingly including an autoregressive structure for the model residual in the model.
- 20. The method of claim 18, wherein applying a cross-correlation function to the market data to systematically detect a promotion lag comprises:

fitting a univariate auto-regressive model to the promotion data;

regressing the product performance data on a first residual series from fitting the model, using variables known to impact product performance

applying the fitted model to transform a second residual series obtained by regressing the product performance data to determine a third residual series.

determining the cross-correlation function between the first and third residual series residual to assess the lag structure; and

selecting a functional form for the lag structure by fitting the market data

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- 21. A system for estimating the impact of a promotion on product performance for a product in the market, the system comprising:
- (a) means for identifying at least one market event whose occurrence will impact product performance;
- (b) means for collecting market data including promotion and product performance data and generating descriptive statistics for each data variable;
- (c) means for selecting a model for the relationship between the at least one promotion and product performance, wherein selecting the model comprises:
- (d) means for applying a cross-correlation function to the market data to systematically detect a promotion lag structure in.
- (e) means examining the temporal pattern of market data against time and accordingly selecting a functional form for the promotion lag structure which fits the occurrence of the at least one market event;
- (f) means applying a cross-correlation function to the market data and promotion lag structure, and other market variables to systematically detect data lag structures for the other market variables;
- (g)means for computing model parameters by fitting the model to market variables and promotion variables, lag structures, market events and market inputs; and

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- (e) means for calculating product performance attributable to the promotion according to the flitted model; and providing said product performance attributable to the promotion to said user as an estimate of promotion impact.
- 22. The system of claim 21, wherein means for fitting the model comprises means for evaluating a model residual to detect any auto-correlation in the model residual, and means for accordingly including an autoregressive structure for the model residual in the model.
- 23. The system of claim 21, wherein means for applying a cross-correlation function to the market data to systematically detect a promotion lag comprises means for:

fitting a univariate auto-regressive model to the promotion data;

regressing the product performance data on a first residual series from fitting the model, using variables known to impact product performance

applying the fitted model to transform a second residual series obtained by regressing the product performance data to determine a third residual series.

determining the cross-correlation function between the first and third residual series residual to assess the lag structure; and

selecting a functional form for the lag structure by fitting the market data